

# State of Georgia Department of Community Health

# **2019 Validation of Performance Measures**

for

**CareSource** 

Measurement Period: Calendar Year 2018

Validation Period: January—June 2019

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-Draft Copy for Review-





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# **Validation of Performance Measures**

#### **Validation Overview**

The Centers for Medicare & Medicaid Services (CMS) requires that states, through their contracts with managed care organizations (MCOs), measure and report on performance to assess the quality and appropriateness of care and services provided to members. In accordance with the 2016 final rule as set forth in 42 CFR §438.330(c), states must require that MCOs, prepaid inpatient health plans (PIHPs), prepaid ambulatory health plans (PAHPs), and primary care case management (PCCM) entities submit performance measurement data as part of the MCOs', PIHPs', PAHPs', and PCCM entities' quality assessment and performance improvement programs. Validating performance measures is one of the mandatory external quality review (EQR) activities described in §438.358(b)(2). The purpose of performance measure validation (PMV) is to assess the accuracy of performance measure rates reported by the MCO and to determine the extent to which performance measures calculated by the MCO follow state specifications and reporting requirements. The state, its agent that is not an MCO, or an external quality review organization (EQRO) can perform this validation.

The Georgia Department of Community Health (DCH) is responsible for administering the Medicaid program and the Children's Health Insurance Program (CHIP) in the State of Georgia. The State refers to its CHIP program as PeachCare for Kids<sup>®</sup>. Both programs include fee-for-service (FFS) and managed care components and deliver services through a statewide provider network. The FFS program has been in place since the inception of Medicaid in Georgia. The DCH contracts with four privately owned managed care organizations, referred to by the State as care management organizations (CMOs), to deliver services to certain categories of members enrolled in the State's Medicaid and PeachCare for Kids<sup>®</sup> programs. Children in state custody, children receiving adoption assistance, and certain children in the juvenile justice system are enrolled in the Georgia Families 360° (GF 360°) managed care program. The Georgia Families (GF) program, implemented in 2006, serves all other Medicaid and PeachCare for Kids<sup>®</sup> managed care members not enrolled in the GF 360° program. Approximately 1.3 million beneficiaries are enrolled in the GF program.

HSAG validated a set of performance measures identified by DCH that were calculated and reported by the CMOs for their GF population. The DCH identified the measurement period as calendar year (CY) 2018. HSAG conducted the validation in accordance with the CMS publication, *EQR Protocol 2:* Validation of Performance Measures Reported by the MCO: A Mandatory Protocol for External Quality Review (EQR), Version 2.0, September 2012.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Georgia Department of Community Health. Medicaid Management Information System. Georgia Families Monthly Adjustment Summary Report June 2016.

<sup>&</sup>lt;sup>2</sup> Department of Health and Human Services, Centers for Medicare & Medicaid Services. *EQR Protocol 2: Validation of Performance Measures Reported by the MCO: A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012. Available at: <a href="https://www.medicaid.gov/medicaid/quality-of-care/medicaid-managed-care/external-quality-review/index.html">https://www.medicaid.gov/medicaid/quality-of-care/medicaid-managed-care/external-quality-review/index.html</a>. Accessed on: Mar 7, 2019.



# **Care Management Organization (CMO) Information**

Basic information about CareSource appears in Table 1, including the office location(s) involved in the 2019 validation of performance measures audit that covered the CY 2018 measurement period.

Table 1—CareSource Information

CMO Name:	CareSource
CMO Location:	600 Galleria Parkway, Ste. 400, Atlanta, GA 30339
On-site Location:	600 Galleria Parkway, Ste. 400, Atlanta, GA 30339
Audit Contact:	Andrea J. Hundley
Contact Telephone Number:	678.214.7505
Contact Email Address:	Andrea.Hundley@caresource.com
Site Visit Date:	April 23, 2019

#### **Performance Measures Validated**

HSAG validated rates for the following set of performance measures selected by DCH for validation. All performance measures were selected from CMS' Core Set of Children's Health Care Quality Measures for Medicaid and CHIP (Child Core Set), Core Set of Health Care Quality Measures for Adults Enrolled in Medicaid (Adult Core Set), or the Agency for Healthcare Research and Quality's (AHRQ's) Quality Indicator measures. *Colorectal Cancer Screening*, a Healthcare Effectiveness Data and Information Set (HEDIS®) non-Medicaid measure, was also included as part of HSAG's validation. The measurement period was identified by DCH as CY 2018 for all measures Table 2 lists the performance measures that HSAG validated, the method required by DCH for data collection, and the specifications the CMO was required to use for each of the measures.

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<sup>&</sup>lt;sup>3</sup> The Centers for Medicare & Medicaid Services. Core Set of Children's Health Care Quality Measures for Medicaid and CHIP, June 2016.

<sup>&</sup>lt;sup>4</sup> The Centers for Medicare & Medicaid Services. Core Set of Health Care Quality Measures for Adults Enrolled in Medicaid, June 2016.

<sup>&</sup>lt;sup>5</sup> HEDIS<sup>®</sup> is a registered trademark of the National Committee for Quality Assurance (NCQA).



#### Table 2—List of CY 2018 Performance Measures for CareSource

	Performance Measure	Method	Specifications
1.	Colorectal Cancer Screening*	Hybrid	Custom (HEDIS- modified)* HEDIS*
2.	Developmental Screening in the First Three Years of Life	Hybrid	Custom (Child Core Set- modified, Feb. 2018)** Child Core Set
3.	Diabetes Short-Term Complications Admission Rate	Admin	Adult Core Set (Feb. 2018) Adult Core Set
4.	Heart Failure Admission Rate	Admin	Adult Core Set (Feb. 2018) Adult Core Set
5.	Live Births Weighing Less Than 2,500 Grams	Admin	Custom (AHRQ- modified, Jun. 2018)*** Child Core Set
6.	Percentage of Eligibles Who Received Preventative Dental Services (reported at the county level [159 counties])	Admin	Child Core Set (Feb. 2018)****
7.	Screening for Depression and Follow-Up Plan (Ages 12–17)	Hybrid	Child core Set (Feb.2018), Adult Core Set (Feb. 2018)
8.	Screening for Depression and Follow-Up Plan (Ages 18 and Older)	Hybrid	Child Core Set (Feb. 2018), Adult Core Set (Feb. 2018)

<sup>\*</sup>CMOs should follow the commercial HEDIS 2019 specification and apply to the Medicaid population.

In addition to the AHRQ and the CMS adult and child core set measures audited by HSAG, DCH required CareSource to report a selected set of HEDIS measures to DCH. CareSource was required to contract with a National Committee for Quality Assurance (NCQA)-licensed audit organization and undergo an NCQA HEDIS Compliance Audit<sup>TM,6</sup>. Final audited HEDIS measure results from NCQA's Interactive Data Submission System (IDSS) were submitted to HSAG and provided to DCH.

<sup>\*\*</sup>CMOs should use the Child Core Set dated February 2018 and apply the following modifications: All claims will have EP modifier 96110. CMOs must exclude claims that also have a UA modifier, as these indicate autism services.

<sup>\*\*\*</sup>CMOs should follow the AHRQ specification dated June 2018, except will report the rate as a percentage and not per live births.

<sup>\*\*\*\*\*</sup>CMO are required to report this rate for each Georgia Medicaid county (159 counties total).

<sup>&</sup>lt;sup>6</sup> NCQA HEDIS Compliance Audit<sup>™</sup> is a trademark of the National Committee for Quality Assurance (NCQA).



Appendix D displays the final audited HEDIS 2019 results for all required measures, covering the CY 2018 measurement period.

## **Description of Validation Activities**

#### **Pre-Audit Strategy**

HSAG conducted the validation activities as outlined in the CMS PMV protocol. To complete the validation activities for CareSource, HSAG obtained a list of the performance measures that were selected by DCH for validation.

HSAG then prepared a document request letter that was submitted to CareSource outlining the steps in the PMV process. The document request letter included a request for source code for each performance measure; a completed HEDIS 2019 Information Systems Capabilities Assessment Tool (ISCAT) and any additional supporting documentation necessary to complete the audit. The letter also included an introduction to the medical record review validation (MRRV) process; a timetable for completion; and instructions for submission. HSAG responded to ISCAT-related questions received directly from CareSource during the pre-on-site phase.

Approximately one month prior to the on-site visit, HSAG provided CareSource with an agenda describing all on-site visit activities and indicating the type of staff needed for each session. HSAG also conducted a pre-on-site conference call with CareSource to discuss on-site logistics and expectations, important deadlines, outstanding Roadmap documentation, and any questions from CareSource regarding the process.

#### **Validation Team**

The HSAG Performance Measure Validation Team was composed of a lead auditor and several validation team members. HSAG assembled the team based on the skills required for the validation and requirements of CareSource. Some team members, including the lead auditor, participated in the on-site meetings at CareSource; others conducted their work at HSAG's offices. Table 3 lists the validation team members, their roles, and their skills and expertise.

**Table 3—Validation Team** 

Name and Role	Skills and Expertise
Mariyah Badani, JD, MBA, CHCA Director, Audits/State & Corporate Services; Secondary Auditor	Management of the audit department; Certified HEDIS Compliance Auditor (CHCA); multiple years of auditing experience, data integration, systems review, and analysis.
Allen Iovannisci, MS, CHCA, CPHQ  Lead Auditor	CHCA; performance measure knowledge, data integration, systems review, and analysis.



Name and Role	Skills and Expertise
Romy Franklin, MS  Audit Specialist, Audits/State & Corporate  Services	Assists with EQR performance measure validation and HEDIS audit-related projects through various stages, including implementation, project management, analysis, reports, orientation, and training.
Tammy Gianfrancisco HEDIS Manager, Audits/State & Corporate Services-	Management of audit timelines and deliverables; source code review management; rate review management.
Sarah Lemley Consultant, Source Code Reviewer	Statistics, analysis, and source code/programming language knowledge.

#### **Technical Methods of Data Collection and Analysis**

The CMS PMV protocol identifies key types of data that should be reviewed as part of the validation process. The following list describes the type of data collected and how HSAG conducted an analysis of these data:

- 2019 ISCAT: CareSource completed and submitted the required and relevant portions of its -ISCAT
  for HSAG's review. HSAG used responses from the ISCAT to complete the pre-on-site assessment of
  information systems.
- Medical record documentation: CareSource completed the medical record section within the ISCAT. In addition, CareSource submitted the following documentation for review: medical record hybrid tools and instructions, training materials for medical record review (MRR) staff members, and policies and procedures outlining the processes for monitoring the accuracy of the reviews performed by the review staff members. To ensure the accuracy of the hybrid data being abstracted by the CMO, HSAG requested CareSource participate in the review of a convenience sample for selected hybrid measures.
- Source code (programming language) for performance measures: CareSource contracted with a
  software vendor, Inovalon, to generate and calculate rates for the performance measures under review
  by HSAG. The source code review was conducted via multiple web-assisted sessions where Inovalon
  displayed the source code for each measure and explained its rate generation and data integration
  processes to HSAG's source code review team.
- **Supporting documentation:** HSAG requested documentation that would provide reviewers with additional information to complete the validation process, including policies and procedures, file layouts, system flow diagrams, system log files, and data collection process descriptions. HSAG reviewed all supporting documentation, identifying issues or areas needing clarification for further follow-up.
- Rate Review: Upon receiving the calculated rates from CareSource, HSAG conducted a review on the reasonableness and integrity of the rates. The review included trending with prior rates and comparison of rates across all CMOs.



#### **On-Site Activities**

HSAG conducted an on-site visit with CareSource on April 23, 2019. HSAG collected information using several methods, including interviews, system demonstrations, review of data output files, primary source verification, observation of data processing, and review of data reports. The on-site visit activities are described as follows:

- **Opening meeting:** The opening meeting included an introduction of the validation team and key CareSource staff members involved in the PMV activities. The review purpose, the required documentation, basic meeting logistics, and queries to be performed were discussed.
- Evaluation of system compliance: The evaluation included a review of the information systems, focusing on the processing of claims and encounter data, provider data, patient data, and inpatient data. Additionally, the review evaluated the processes used to collect and calculate the performance measure rates, including accurate numerator and denominator identification and algorithmic compliance (which evaluated whether rate calculations were performed correctly, all data were combined appropriately, and numerator events were counted accurately).
- Review of ISCAT and supporting documentation: The review included processes used for collecting, storing, validating, and reporting performance measure rates. This session was designed to be interactive with key CareSource staff members so that HSAG could obtain a complete picture of all the steps taken to generate the performance measure rates. The goal of the session was to obtain a confidence level as to the degree of compliance with written documentation compared to actual processes. HSAG conducted interviews to confirm findings from the documentation review, expand or clarify outstanding issues, and ascertain that written policies and procedures were used and followed in daily practice.
- Overview of data integration and control procedures: The overview included discussion and observation of source code logic, a review of how all data sources were combined, and a review of how the analytic file was produced for the reporting of selected performance measure rates. HSAG performed primary source verification to further validate the output files, reviewed backup documentation on data integration, and addressed data control and security procedures. HSAG also reviewed preliminary rates during this session, if available.
- Closing conference: The closing conference included a summation of preliminary findings based on the review of the ISCAT and the on-site visit, and revisited the documentation requirements for any post-visit activities.

HSAG conducted several interviews with key CareSource staff members who were involved with performance measure reporting.

Table 4 displays a list of key CareSource interviewees:



#### Table 4—List of CareSource Interviewees

Name	Title
Andrea Hundley	Director, Regulatory—GA Market
Howard Martin	Team Lead, Information Technology (IT)
Nicole Johnson	Director, Performance Management
Annette Johnson	Manager
Tiffany Parr	Director of Quality Improvement
Brendan Ibe	Manager, Quality and Performance Improvement
Akban Shaneef	Director, Encounters
Ahanata Pandey	Business Intelligence (BI) Developer
Angela Wilson	Senior Business Analyst
Brenard Otabil	Business Analyst
Brent Lackey	Manager, IT Population Health
Candace Owens	Senior Compliance & Delegation
Chelsi Hall	Encounters
Deb Harmsen	Director, Configuration
Erika Lawrence	Regulatory Contract Manager
Gina Case	Manager, Claims Editing System (CES) Configuration
Jeff Severino	Director, IT
Jordan Seeback	Claims Manager
Karen Beldslschies	Manager, IT Population Health
Prasanth Appala	BI Developer
Rachel Angrignon	Manager, Encounters
Theresa Moser	Claims Analyst
Thomas Dube	Manager, STAR Ratings
Thomas Wall	Director, Application Development
Uma Kotanu	Data Analyst
Diedra Wells	Manager, Compliance and Delegation
Dana Donaldson	Director of Finance
Kristen Halsey	Director, Vendor Risk



# **Data Integration, Data Control, and Performance Measure Documentation**

There are several aspects crucial to the calculation of performance measure rates. These include data integration, data control, and documentation of performance measure rate calculations. Each of the following sections describes the validation processes used and the validation findings. For more detailed

information, see Appendix A of this report. **Data Integration** Accurate data integration is essential for calculating valid performance measure rates. The steps used to combine various data sources (including claims/encounter data, eligibility data, and other administrative data) must be carefully controlled and validated. HSAG validated the data integration process used by CareSource, which included a review of file consolidations or extracts, a comparison of source data to warehouse files, data integration documentation, source code, production activity logs, and linking mechanisms. Overall, HSAG determined that the data integration processes in place at CareSource were: Acceptable Not acceptable **Data Control** CareSource's organizational infrastructure must support all necessary information systems; and its quality assurance practices and backup procedures must be sound to ensure timely and accurate processing of data, and to provide data protection in the event of a disaster. HSAG validated the data control processes CareSource used which included a review of disaster recovery procedures, data backup protocols, and related policies and procedures. Overall, HSAG determined that the data control processes in place at CareSource were: Acceptable Not acceptable **Performance Measure Documentation** Sufficient, complete documentation is necessary to support validation activities. While interviews and system demonstrations provided supplementary information, the majority of the validation review findings were based on documentation provided by CareSource. HSAG reviewed all related

documentation, which included the completed Roadmap, job logs, computer programming code, output files, work flow diagrams, narrative descriptions of performance measure calculations, and other related documentation. Overall, HSAG determined that the documentation of performance measure rate calculations by CareSource was:

Acceptable
Not acceptable



#### **Validation Results**

HSAG evaluated CareSource's data systems for the processing of each data type used for reporting DCH performance measure rates. General findings are indicated below.

## **Medical Service Data (Claims and Encounters)**

CareSource used the Facets system to process its medical claims. Each claim was required to meet rigorous edit checks to ensure claims contained complete, accurate information prior to being entered into Facets. Once the claims were loaded into Facets, additional edit checks were made to ensure members are active and claims are valid. CareSource used an internal relational database to store all incoming data. The internal data warehouse contained both internal and external data files used for reporting.

CareSource, a 100 percent FFS plan, did not collect encounters (capitated claims) from any provider. CareSource's Facets system captured unlimited procedure and diagnosis codes and was able to distinguish between primary and secondary codes. CareSource did not accept nonstandard coding or nonstandard claim forms to be entered into Facets. CareSource only allowed three standard formats: professional claims 837P, institutional claims 837I, and dental claims 837D.

CareSource claims passed through its pre-adjudication processes which included member and provider matching to ensure all claims are appropriately coded with active providers and members. Approximately 85 percent of CareSource's Georgia claims were auto-adjudicated. Pended claim volumes and aging claims were monitored by claim managers daily.

Claims were not entered manually. All paper claims received were sent to CareSource's mailroom, scanned and processed through optical character recognition (OCR) software, and converted via electronic data interchange (EDI). No report was generated to document overrides as most pended claims resulted from error messages that needed to be overridden after review to adjudicate.

CareSource used Optum's CES to edit both professional and facility claims and to verify claims for potential coding, reimbursement, and business rule errors.

HSAG reviewed each system and process associated with claims and encounters and had no concerns. Each system captured appropriate, standard coding schemes as required for reporting. CareSource only used standard claim forms for each service type (i.e., dental, professional, institutional, and pharmacy).

CareSource sent medical (professional, institutional inpatient, institutional outpatient), dental, vision, and NCPCP (pharmacy) claims in the weekly encounter file to DXC. A subset of denied claims were not included in this weekly submission for reasons such as "wrong payee," "definite duplicate claim," and "non-compliant modifier." CareSource advised that 94 percent of all encounters were accepted by DXC/DCH.

HSAG had no concerns with CareSource's claims and encounter data processing.



#### **Enrollment Data**

CareSource, like all CMOs, received the State enrollment files daily and monthly and loaded them into Facets. CareSource collected and loaded the enrollment data daily, captured the Medicaid identifier, and created an internal Facets identifier. CareSource used the aid codes received by the State to ensure members were assigned to specific populations, which helped to identify the Georgia Community Care population when reporting on each measure. HSAG confirmed that Planning for Healthy Babies® (P4HB®) data were not included in the reporting population.

HSAG verified the aid codes and populations during the on-site audit and conducted primary source verification of distinct members to ensure the populations were separated.

CareSource's Facets system captured all relevant fields from the State's enrollment files and continued to monitor daily file updates, cancellations, and renewals.

Members with duplicate identifiers were merged into a single record based on the State's most recent identification number. The duplicate member identifier only occurred with newborns and was quickly resolved at CareSource. Claims processed under the original identifier were linked to the new identifier.

HSAG did not have any concerns with CareSource's enrollment process.

#### **Provider Data**

HSAG conducted a thorough review of CareSource's provider data capture. CareSource used Facets to capture all provider data. Provider specialties were captured appropriately, and national practitioner identifiers (NPIs) and tax identifiers were captured in Facets in separate fields.

Although the State credentialed all in-state providers and submitted this information to the CMOs, HSAG conducted primary source verification of the provider specialties and federally qualified health center (FQHC) designations.

During primary source verification, HSAG selected a family practitioner and an FQHC to examine. Both entities were mapped to primary care providers in Facets appropriately.

HSAG found CareSource to be compliant with the credentialing and assignment of individual provider specialties in the Facets system and the vendor software system, DST Health Solutions (DST).

Provider specialties had no impact on the measures under review.

HSAG did not have any concerns with CareSource's provider data processing.



### Medical Record Review Validation (MRRV)

Table 5—MRRV Results for CareSource

Performance Measure	Initial Sample Size	Findings	Follow-up	Final Results
Colorectal Cancer Screening	0	N/A	N/A	N/A
Developmental Screening in the First Three Years of Life	16	No concerns	None	R
Screening for Depression and Follow-Up Plan (Ages 12–17)	16	One critical error	Second sample passed	R
Screening for Depression and Follow-Up Plan (Ages 18 and Older)	16	No concerns	None	R

## Supplemental Data

Supplemental data were not evaluated under the scope of the PMV audit.

## **Data Integration**

CareSource used DST to produce the measures under review. DST provided the software and processed the files on behalf of CareSource. Data extracts included enrollment, provider, and claims files and were submitted to DST CareAnalyzer using its proprietary formats.

Data extracts were loaded into CareAnalyzer raw tables, and data quality reports were reviewed and approved prior to finalizing all data loads. When issues were identified, new data files would be created to correct the issues.

Standard administrative refreshes occurred monthly between January and April with one exception—enrollment data, which were frozen in January. All claims files underwent a complete refresh.

HSAG conducted primary source verification on *Screening for Depression and Follow-Up Plan (Ages 18 and Older)* and *Live Births Weighing Less Than 2,500 Grams* measures. No issues or concerns were noted during the review. All numerators were appropriately mapped.

One measure required source code review as it was produced external to DST software. DST also provided code walkthroughs for the measures it produced. All measures were approved by HSAG and were found to be consistent with the specifications.

HSAG had no concerns with the data integration process.



## **Performance Measure Specific Findings**

Based on all validation activities, HSAG determined validation results for each performance measure rate. HSAG provided an audit result for each performance measure as defined in Table 6.

Table 6—Audit Results and Definitions for Performance Measures

Reportable (R)	The CMO followed the State's specifications and produced a reportable rate or result for the measure.
Not Reportable (NR)	The calculated rate was materially biased.
Not Applicable (NA)	The CMO followed the State's specifications, but the denominator was too small (<30) to report a valid rate.

According to the CMS protocol, the audit result for each performance measure rate is determined by the magnitude of the errors detected for the audit elements, not by the number of audit elements determined to be "Not Reportable." It is possible for a single audit element to receive an audit result of "NR" when the impact of the error associated with that element biased the reported performance measure rate more than 5 percentage points. Conversely, it is also possible that several audit element errors may have little impact on the reported rate, leading to an audit result of "R."

Table 7 displays the key review findings and final audit results for CareSource for each performance measure rate. For additional information regarding performance measure rates, see Appendix C of this report.

Table 7—Key Review Findings and Audit Results for CareSource

	Performance Measures	Key Review Findings	Audit Results
1.	Colorectal Cancer Screening	Continuous enrollment criteria not met.	NA
2.	Developmental Screening in the First Three Years of Life	No concerns	R
3.	Diabetes Short-Term Complications Admission Rate	No concerns	R
4.	Heart Failure Admission Rate	No concerns	R
5.	Live Births Weighing Less Than 2,500 Grams	No concerns	R
6.	Percentage of Eligibles Who Received Preventive Dental Services (reported at the county level [159 counties])	No concerns	R
7.	Screening for Depression and Follow-Up Plan (Ages 12–17)	No concerns	R
8.	Screening for Depression and Follow-Up Plan (Ages 18 and Older)	No concerns	R



# **Appendix A. Data Integration and Control Findings**

# **Documentation Worksheet**

CMO Name:	CareSource
On-Site Visit Date:	April 23, 2019
Reviewers:	Allen Iovannisci, MS, CHCA, CPHQ

Table A-1—Data Integration and Control Findings for CareSource

Data Integration and Control Element	Met	Not Met	N/A	Comments
Accuracy of data transfers to assigned performance mean	sure data	a reposit	ory.	
The CMO accurately and completely processes transfer data from the transaction files (e.g., membership, provider, encounter/claims) into the performance measure data repository used to keep the data until the calculations of the performance measure rates have been completed and validated.				No concerns
Samples of data from the performance measure data repository are complete and accurate.				No concerns
Accuracy of file consolidations, extracts, and derivations.	•			
The CMO's processes to consolidate diversified files and to extract required information from the performance measure data repository are appropriate.				No concerns
Actual results of file consolidations or extracts are consistent with those that should have resulted according to documented algorithms or specifications.				No concerns
Procedures for coordinating the activities of multiple subcontractors ensure the accurate, timely, and complete integration of data into the performance measure database.				No concerns
Computer program reports or documentation reflect vendor coordination activities, and no data necessary for performance measure reporting are lost or inappropriately modified during transfer.				No concerns
If the CMO uses a performance measure data repository, its structure and format facilitates any required programming necessary to calculate and report required performance measure rates.				
The performance measure data repository's design, program flow charts, and source codes enable analyses and reports.				No concerns



Data Integration and Control Element	Met	Not Met	N/A	Comments
Proper linkage mechanisms are employed to join data from all necessary sources (e.g., identifying a member with a given disease/condition).				No concerns
Assurance of effective management of report production	and of t	he repor	ting soft	ware.
Documentation governing the production process, including CMO production activity logs and the CMO staff review of report runs, is adequate.				No concerns
Prescribed data cutoff dates are followed.	$\boxtimes$			No concerns
The CMO retains copies of files or databases used for performance measure reporting in case results need to be reproduced.				No concerns
The reporting software program is properly documented with respect to every aspect of the performance measure data repository, including building, maintaining, managing, testing, and report production.				No concerns
The CMO's processes and documentation comply with the CMO standards associated with reporting program specifications, code review, and testing.				No concerns



# **Appendix B. Denominator and Numerator Validation Findings**

# **Reviewer Worksheets**

CMO Name:	CareSource	
On-Site Visit Date:	April 23, 2019	
Reviewers:	Allen Iovannisci, MS, CHCA, CPHQ; Mariyah Badani, JD, MBA, CHCA	

Table B-1—Denominator Validation Findings for CareSource

Audit Element	Met	Not Met	N/A	Comments
For each of the performance measures, all members of the relevant populations identified in the performance measure specifications are included in the population from which the denominator is produced.				No concerns
Adequate programming logic or source code exists to appropriately identify all relevant members of the specified denominator population for each of the performance measures.				No concerns
The CMO correctly calculates member months and member years if applicable to the performance measure.				No concerns
The CMO properly evaluates the completeness and accuracy of any codes used to identify medical events, such as diagnoses, procedures, or prescriptions, and these codes are appropriately identified and applied as specified in each performance measure.				No concerns
If any time parameters are required by the specifications of the performance measure, they are followed (e.g., cutoff dates for data collection, counting 30 calendar days after discharge from a hospital).				No concerns
Exclusion criteria included in the performance measure specifications are followed.				No concerns
Systems or methods used by the CMO to estimate populations when they cannot be accurately or completely counted (e.g., newborns) are valid.				No concerns



## Table B-2—Numerator Validation Findings for CareSource

Audit Element	Met	Not Met	N/A	Comments
The CMO uses the appropriate data, including linked data from separate data sets, to identify the entire at-risk population.				No concerns
Qualifying medical events (such as diagnoses, procedures, prescriptions, etc.) are properly identified and confirmed for inclusion in terms of time and services.				No concerns
The CMO avoids or eliminates all double-counted members or numerator events.				No concerns
Any nonstandard codes used in determining the numerator are mapped to a standard coding scheme in a manner that is consistent, complete, and reproducible, as evidenced by a review of the programming logic or a demonstration of the program.				Nonstandard codes were not used
If any time parameters are required by the specifications of the performance measure, they are followed (i.e., the measured event occurred during the time period specified or defined in the performance measure).				No concerns



# **Appendix C. Performance Measure Rate Submission File**

Appendix C contains CareSource's final audited performance measure rate submission file.



# **Appendix D. HEDIS Interactive Data Submission System Data**

Appendix D contains CareSource's reported IDSS data from its NCQA HEDIS Compliance Audit.